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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/991,329 | 11/14/2001 | Samuel G. Fletcher | T9320.B | 3555 |
| 20449 | 7590 | 07/01/2004 | EXAMINER | |
| KARL R CANNON PO BOX 1909 SANDY, UT 84091 | | | MARMOR II, CHARLES ALAN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3736 | |
| DATE MAILED: 07/01/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/991,329

Applicant(s)

FLETCHER, SAMUEL G.

Examiner

Charles A. Marmor, II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-129 is/are pending in the application.
- 4a) Of the above claim(s) 34-124 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-33 and 125-129 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11142001, 11042002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Invention I, claims 1-33 and 125-129, in the reply filed on April 12, 2004 is acknowledged. The traversal is on the ground(s) that Groups II-VI are drawn to inventions that include key aspects that are similar to the key aspects of Group I, and examination of all the claims in the same application allegedly would not pose a serious burden to the Examiner because of the commonality of dominant elements in the claims of Groups I-VI. This is not found persuasive because although the claims directed to certain groups may share key aspects with the claims directed to other groups, the groups are independent and/or unrelated. As discussed in the Restriction Requirement mailed March 8, 2004, the inventions of Groups I-VI have acquired a separate status in the art because of their recognized divergent subject matter as evidenced by the separate field of search required for each group. For example, the methods of providing speech therapy would require a search of at least class 434, subclass 185, that would not be required for the methods of assessing speech; while the methods of assessing speech would require a search of at least class 704, subclass 200, that would not be required for the methods of providing speech therapy. Moreover, the methods for providing speech therapy are unrelated to a method of using a user's tongue to operate a device having electronic controls. The methods of providing speech therapy would require a search of at least class 434, subclass 185, that would not be required for the method of using a user's tongue to operate a device having electronic controls; while the method of using a user's tongue to operate a device having electronic controls would require a search of at least class 340, subclass 825.19,

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that would not be required for the methods of providing speech therapy. The Examiner recognizes the burden on the Applicant to file multiple applications and the incurred cost, but in view of the foregoing, the two criteria for a proper requirement for restriction between patentably distinct inventions have been met. Therefore, Groups II-VI, claims 34-124 are withdrawn from consideration.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: “44” as mentioned at page 25, line 16. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: “15” as included in Fig. 2. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:
- a. On page 18, line 7, “25” apparently should read --15--.
 - b. On page 21, line 16, “know” apparently should read --known--.
- Appropriate correction is required.

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-33 and 125-129 are rejected under 35 U.S.C. 102(b) as being anticipated by Fletcher (1992). Fletcher teaches a method for providing speech therapy in Chapter 9 that reads on the claims of the instant application. The method includes displaying a model representation of a position of contact between a clinician (model) tongue and mouth during speech; displaying a representation of a position of contact between a client's (learner's) tongue and mouth during speech; instructing the learner to mimic the model representation of the position of contact between the model tongue and mouth during speech; comparing the representation of the position of contact between the learner's tongue and mouth during speech with the model representation of position of contact between the model tongue and mouth during speech; generating a numerical score representing the closeness of fit between the representation of position of contact between the learner's tongue and mouth during speech and the model representation of position of contact between the model tongue and mouth during speech; and providing positive reinforcement when the learner mimics the model representation of position of contact between the model tongue and mouth during speech. The method further includes providing model acoustic representations of the speech. The representations of position of contact between the learner's tongue and mouth during speech and the model representations of

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position of contact between the model tongue and mouth during speech are displayed on a split-screen. The auditory mimicry accuracy between the learner and the model acoustic representation are analyzed acoustically and a numerical score representing the closeness of acoustic fit is generated. Sound spectrographic displays are generated from the model acoustic representation and the learner's speech. The position of contact between the learner's tongue and mouth during speech is represented by a grid of dots on the display such that the grid of dots corresponds to sensors disposed on a sensor plate which is custom fitted in the mouth of the learner, where the dots expand and change color corresponding to contact between the learner's tongue and mouth. A dental landmark is displayed on the display to help orient the position of contact between the learner's tongue and mouth. The speech includes sounds, words, phrases or sentences that may be displayed in writing. The position of contact between the learner's tongue and mouth during speech is recorded, as is the learner's speech corresponding to the position of contact between the learner's tongue and mouth. The method is capable of being performed with a client (learner) who is at least one of learning to compensate for physical deficiencies; unable to overcome speech disorders through traditional auditory based therapy; has severe to profound hearing loss; has stroke-limited ability to control tongue movement and placement; has limited high frequency sound perception; has reduced ability to build up pressure in the mouth; has physical abnormalities affecting the mouth and vocal tract; has gradually deteriorating hearing loss and needs assistance to maintain speech articulation skills; has limited energy to devote to speech activity; learning new speech patterns after cochlear implant surgery; and learning a speech pattern corresponding to a foreign language or dialect.

Due to the length of the Fletcher reference, the apparent common identity of author of the

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Fletcher reference and the inventor of the instant application, and in an effort to avoid violation of U.S. copyright law, only the title page of the Fletcher reference accompanies this Office Action.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Javkin et al. ('171) teach a speech training system that allows a student to enter any utterance to be learned and have the articulatory model movements required to produce the utterance displayed on a CRT screen. Hutchkins ('917) teaches a speech therapy system having a split-screen display that allows an idealized model for forming a series of sounds to be displayed adjacent to a real time display resulting from the system user's current input.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Marmor, II whose telephone number is (703) 305-3521. The examiner can normally be reached on M-TH (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mary Beth Jones can be reached on (703) 308-3400. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles A. Marmor, II
Primary Examiner
Art Unit 3736

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June 25, 2004